

BellSouth

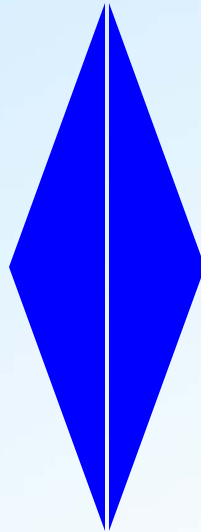
Business Continuity & Disaster Recovery



>> Natural vs. Man-Made Disasters

Natural Disasters

- We know where it will hit
- There is planning time
- We have evacuation time
- We can set-up emergency centers



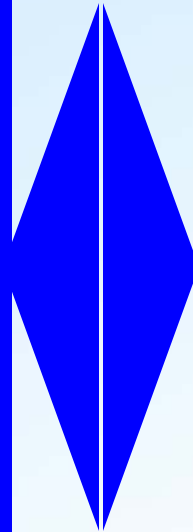
Man-Made Disasters

- Little to no warning
- No planning time
- Wide variety of potential incidents
- Can occur anywhere
- Can be malicious attacks

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>> BellSouth Emergency Management

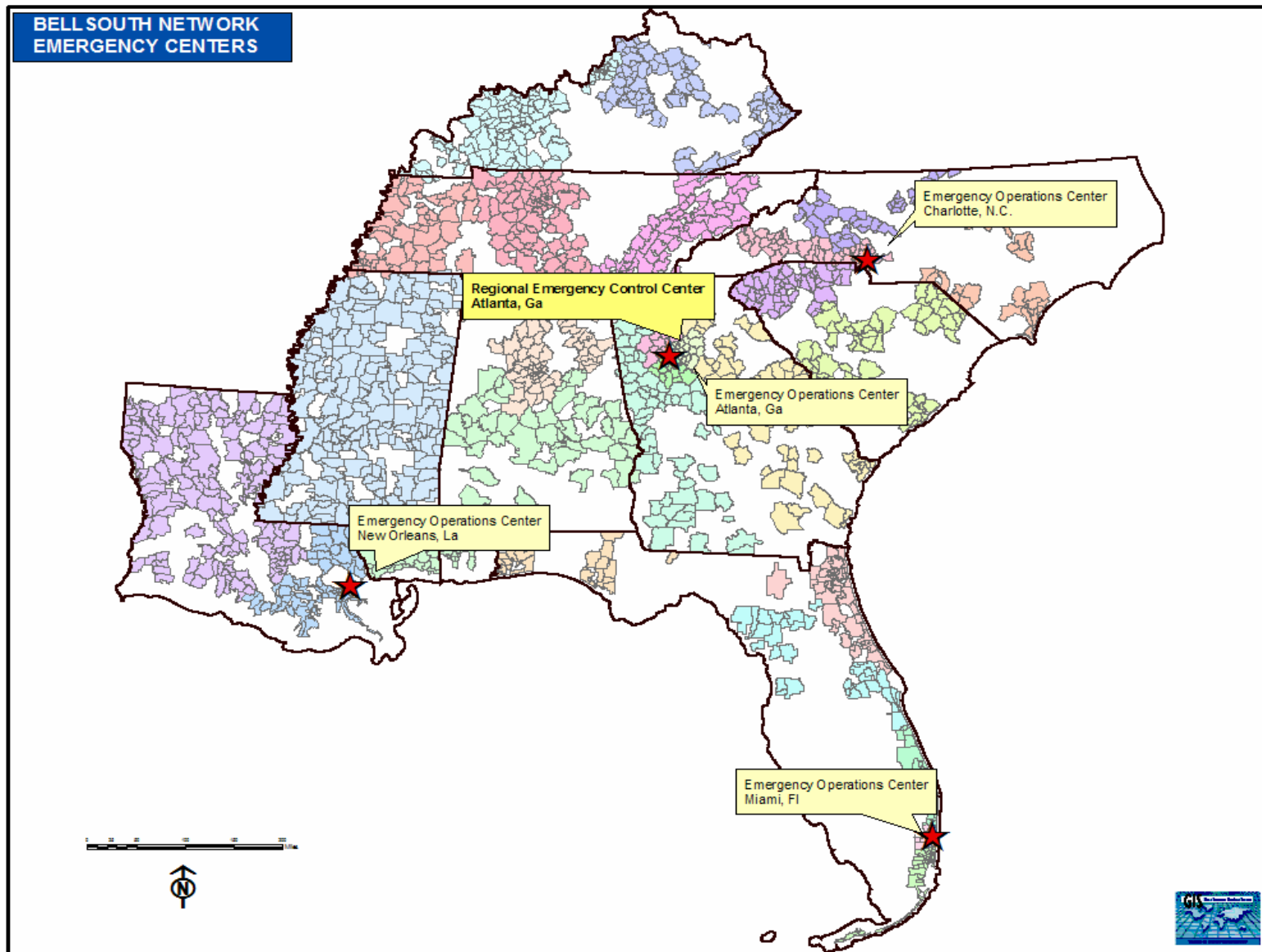
- Preparation
- Monitoring
- Restoration

>> BellSouth Emergency Management

- Preparation
 - Securing Assets
 - Pre-positioning Restoration Resources
- Monitoring
 - Monitoring Central Offices & Equipment Alarms
 - Monitoring & Restoring Network Traffic
- Restoration
 - Our Network
 - Our People



BellSouth Emergency Operations Centers



>> Emergency Preparation

- Activation of BellSouth's Regional Emergency Control Center (RECC)
- Activation of BellSouth's State(s) Operations Centers (EOC)
- Stage Regional Generator Pool
- Fuel All Equipment
- Test Central Office Emergency Generators
- Position Resources
- Sandbag Necessary Locations
- IT Operations at Full Readiness and Extended Operations Schedule

>> Supply Chain Pre-provisioning

- Cable and wire
 - 188 reels of fiber and copper cable
- General materials
 - 758 types of telecommunications materials
 - Closures
 - Terminal blocks
 - Cable straps and ties
 - Strand for aerial cable replacement
 - Batteries
- Tools
 - Pruners, screw drivers, drills
 - Insect repellent, sunscreen
 - Safety equipment

>> ECC Functional Players

- Corporate Real Estate
- Network Logistics
- Generator Support
- OSP Engineering Support
- Manpower
- Capacity Management
- Transmission Engineering
- Radio Team
- Central Office Support
- I&M Support
- Network IT Systems Support
- IT Systems Support
- Network Reliability Center
- Network Management Center
- Work Management Centers
- Access Customer Centers
- CLEC Centers
- 911 Centers
- Residential Repair Centers
- Business Repair Centers
- Federal Emergency Management
- Corporate Security
- National Security
- Public Relations
- Human Resources
- Operator Services
- Business Continuity
- Mapping
- Risk Management

>> BellSouth Emergency Critical Interfaces

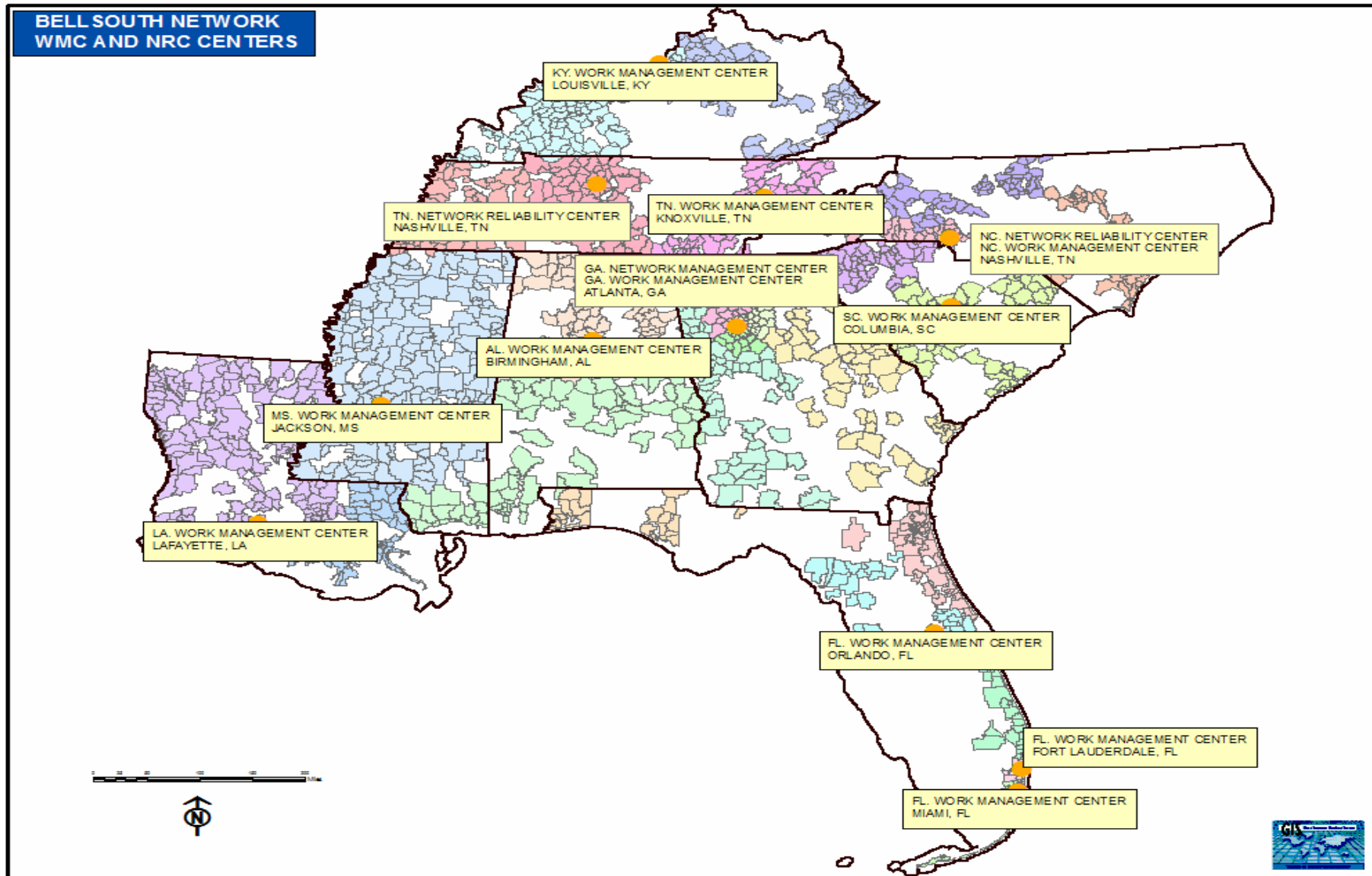
- Power Companies
- Wireless Service Providers
- Government Communications
 - Homeland Security / FEMA
 - State Government
 - County City
 - Hqtrs ECC
 - State EMD
 - Turf ECC
- Suppliers / Vendors
- Customer / Media Communications

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Monitoring the Network



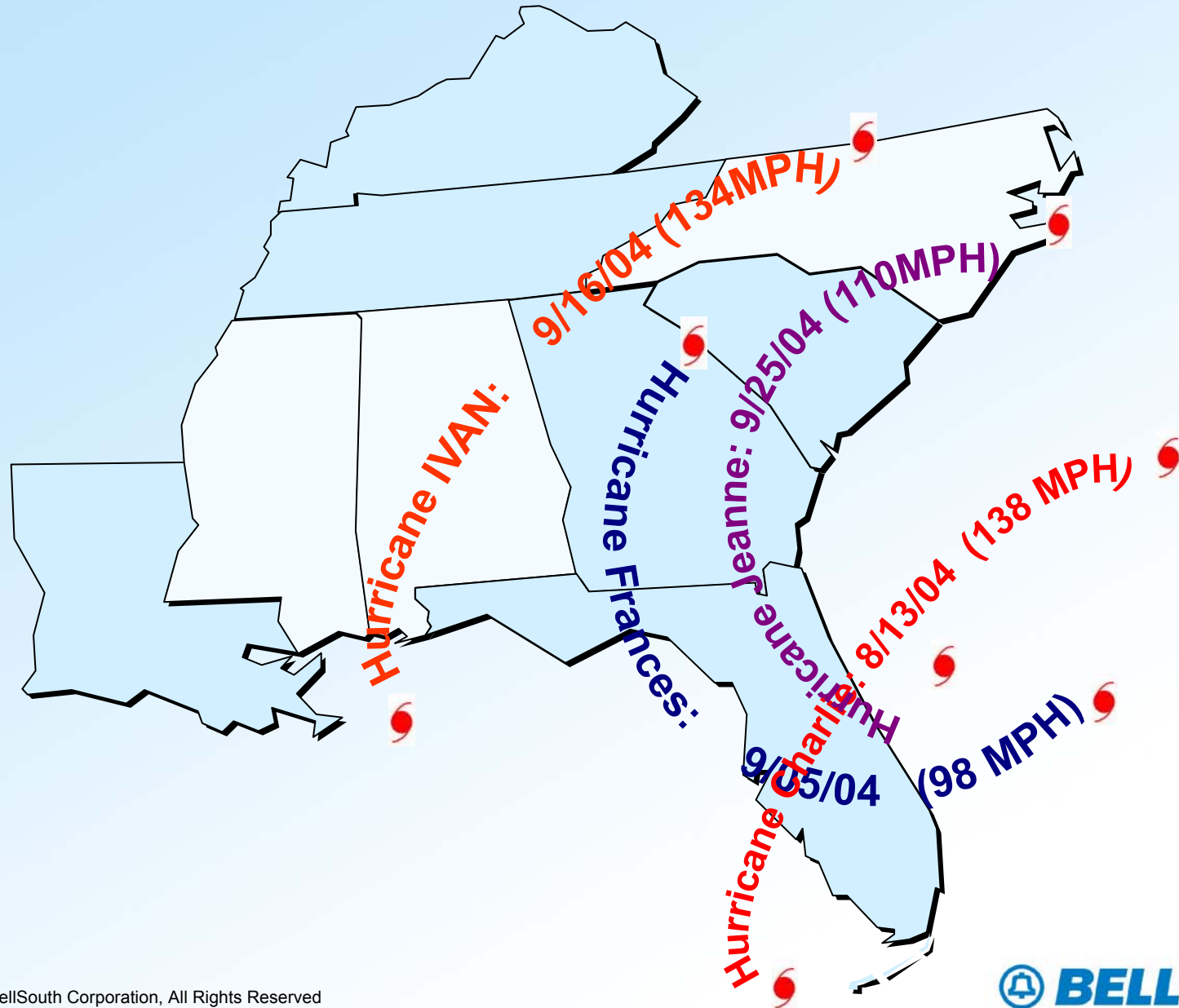
>> Monitoring - BellSouth Network Management

Secured Systems and Facilities:

- Physical Building Alarms
- Reinforced Physical Facilities (against natural- and man-made disasters).
- Video Surveillance.
- Network Encryption.
- Access Control Management Systems.
- Exceed Industry-Standard Security Measures.



>> 2004: THE YEAR OF THE HURRICANE



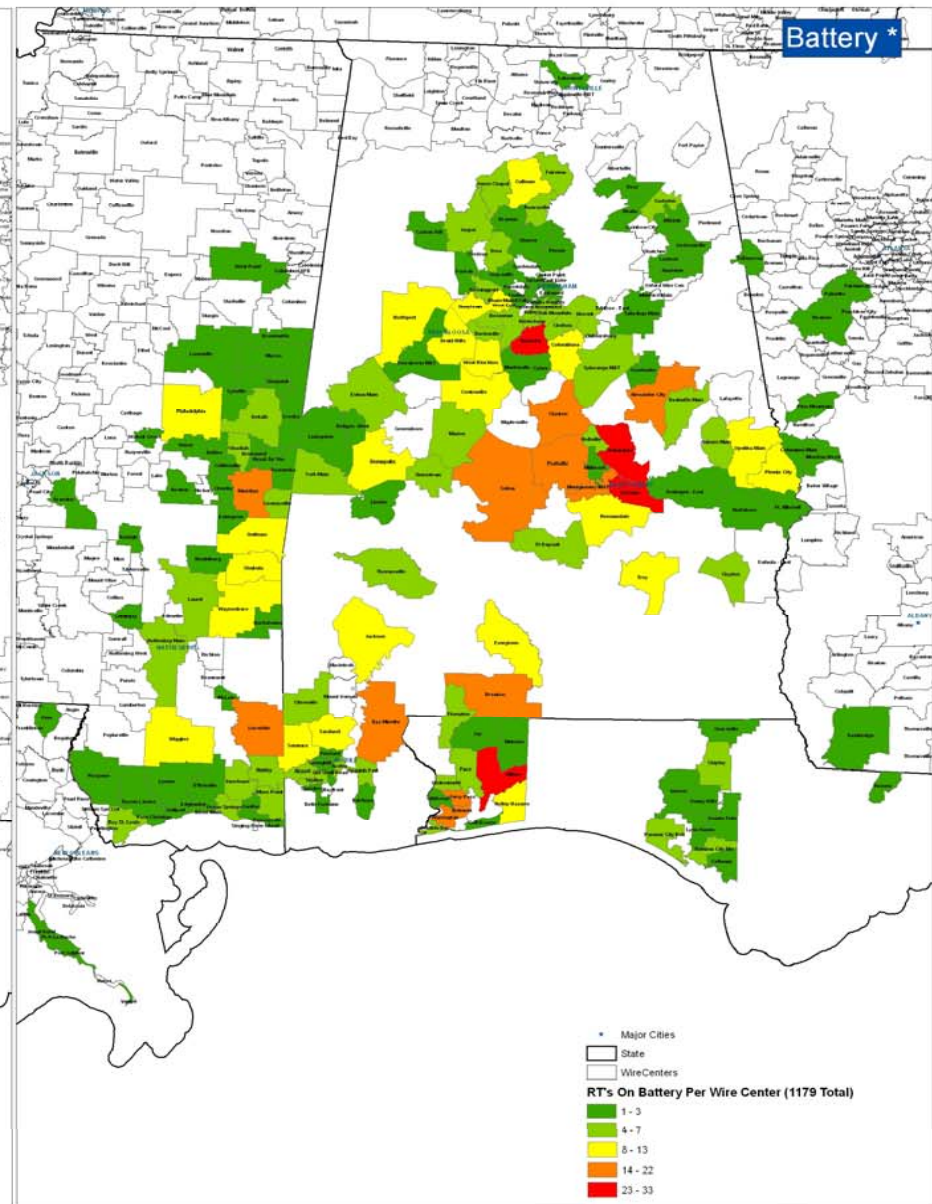
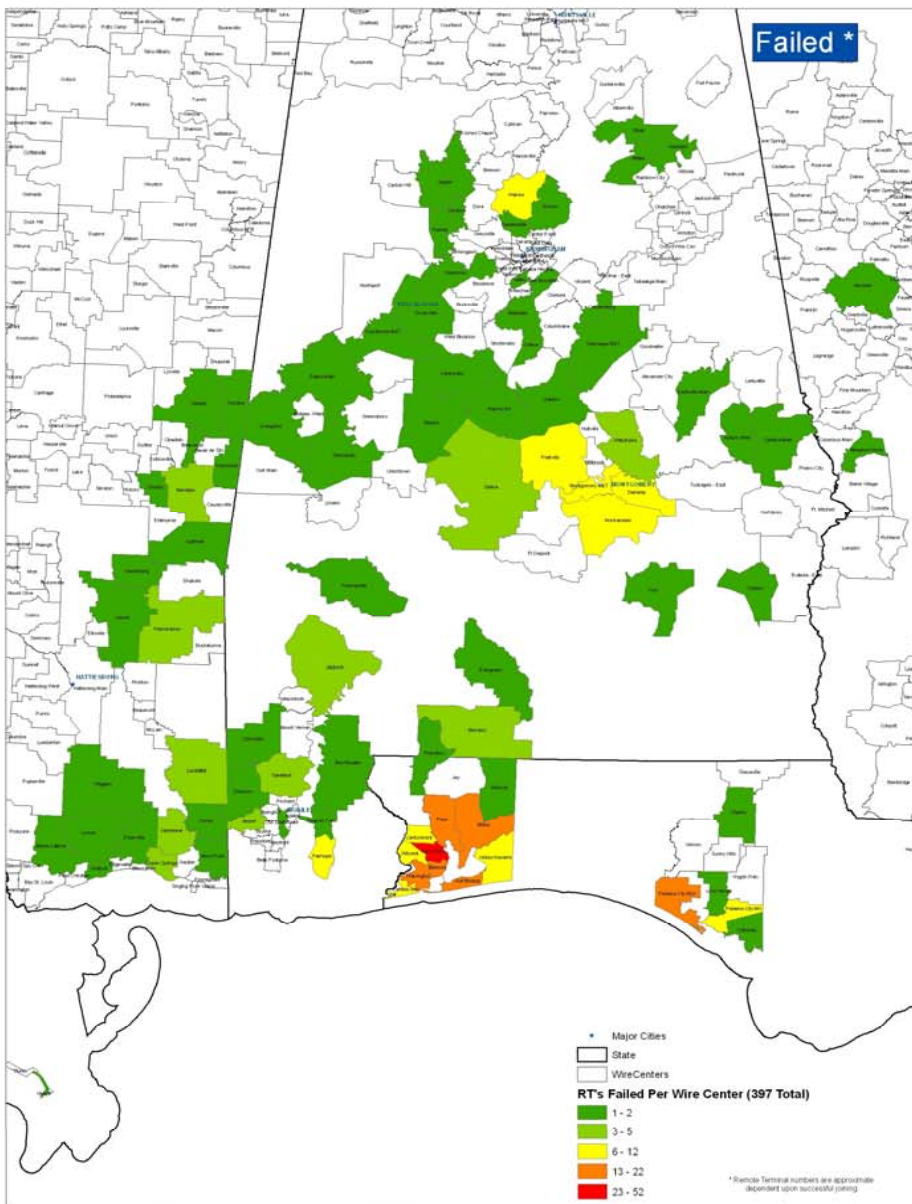
HURRICANE IVAN NRC STORM REPORT

DESS STATUS

09/16/04 3:00 PM



PRIVATE/PROPRIETARY
CONTAINS PRIVATE AND/OR PROPRIETARY INFORMATION
MAY NOT BE USED OR DISCLOSED
OUTSIDE THE BELL SOUTH COMPANIES EXCEPT
PURSUANT TO A WRITTEN AGREEMENT



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Restoration – Our Network



>> Restoration – Our Network



>> Restoration – Logistics & Materials

- **Equipment Shipped**
 - 20,100 Electronic Equipment Plug-Ins
 - 11 Million Feet of Aerial Service Wire
 - 520 Truckloads of Network Equipment
- **Generators Deployed**
 - 1100 Generators deployed multiple times
 - Total of 400 Truckloads of generators moved
- **Ice and Water**
 - 120,000 bags of Ice
 - 15 Truckloads of Water
- **Fuel Distributed**
 - 680,000 gallons of diesel fuel for generators and vehicles
 - 230,000 lbs of propane for generators
 - 460,000 gallons of unleaded gas for vehicles
 - 20 Refueling Tankers, 3 re-supply Tankers



>> Storm Impact

	Total Cable Spans	Total Damaged Poles	Damaged Drops
Charley	1,294	301	2,364
Frances	5,403	1,837	21,912
Ivan	9,625	3,150	24,435
Jeanne	3,062	1,068	18,638
TOTAL	19,384	6,356	67,349

>> Restoration – Manpower

- FL Internal Moves to FL Restoration Sites
338
- Out of State Loans to FL
502
- FL Retiree Hires for Restoration
181
- Other Telco Loans (SBC)
120
- Outside Contractors
216



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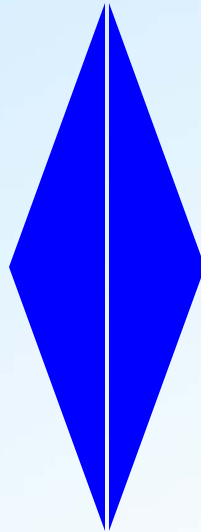
- Our Network Held Up Remarkably Considering the Circumstances
- No Office Failures
- Critical Service Links Maintained
- Our Employees Responded to the Challenge



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SABER

“Service Assurance Brigade for Emergency Response”



SABER Overview

>> Development of SABER

■ 9/11/2001 – the World changes

- BellSouth Business Continuity Planning (BCP) revised to address new hazards
- Corporate processes developed and implemented to respond to suspicious substances following the anthrax scare

■ Mid Year 2002

- Hazmat program developed and integrated into the Business Continuity Plans
- Identified the need for an internal hazmat response team

■ Through Mid Year 2003

- Team members solicited, interviewed, and selected
- SABER Team initiated September 2003

>> SABER Telecom Skills

- Network
 - Knowledge of outside plant, CO plant – switch, CO plant – power
 - Customer premise equipment
- Technology Community
 - Data Center Ops/Transport
 - Server and resource room maintenance
- Corporate Real Estate
 - Building systems operations – mechanical, electrical, etc.
- HazMat/Safety
 - Use of various types of HazMat PPE (Personal Protective Equipment)
 - Hazardous materials management
 - BellSouth safety training, CPR and First Aid

>> SABER Training

- Training program
 - complies with OSHA requirements for hazmat operations
 - exceeds hazmat industry standards
 - complies with BellSouth health & safety policies
- Completed over 27 training courses in the areas of:
 - Hazardous Materials Management, Incident Command Systems (ICS), Weapons of Mass Destruction (WMD), Emergency Response Management, BellSouth Safety Training, CPR and First Aid
- Recently named as 1st private sector entity to be authorized to train at the United States Department of Homeland Security's only federally chartered WMD training center.

>> SABER Services

- SABER will enter contaminated environments to maintain business critical systems.
- These systems may be located in data centers, central offices, outside plant equipment, or customer premise.
- SABER is capable of using all levels of personal protective equipment required in contaminated environments.
- SABER's extensive hazmat equipment inventory includes hazmat response trailers, satellite communication equipment, hazmat suits and gear, air monitoring, decontamination devices, and rescue devices.



>> First SABER Incident Response





**Central Office
Graniteville, SC**

Approximately
200 yards

**Chemical
Spill Site**



SABER Activation - January 9, 2005





SERVICE ASSURANCE



EMERGENCY RESPONSE



BELLSOUTH
HAZMAT

Tychem SL













>> Incident Response

- SABER Tasks Completed Over 11-Day Period
 - Inspection and maintenance of central office switch, engine, batteries, electrical and mechanical equipment
 - Inspection & maintenance of outside plant
 - Manholes, cross boxes, SLC sites, aerial cable, pedestals, etc.
 - Decontamination of company vehicles
 - Testing and venting of manholes
 - Complete emergency service orders for CO
 - Prepare employees for entry back into impacted area

>> The “Spirit of Service” Continues

